

Justin Tsai

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WORK EXPERIENCE

Unity Engineer

May 2019 - Current

California State Polytechnic University, Pomona

Pomona, CA

- Work closely with clients and team members to create VR experiences that shape education.
- Participate in team sprint meetings to rapidly prototype and implement features.

Virtual Reality Lab Administrator

Aug 2017 - May 2019

California State Polytechnic University, Pomona

Pomona, CA

- Led and managed groups of students to develop VR and AR projects for presentation to industry sponsors.
- Mentored students and hosted workshops and code reviews to teach basic Unity development.
- Improved readability and responsiveness of organization website by redesigning it from scratch.

EDUCATION

California State Polytechnic University, Pomona

May 2019

Bachelor of Science, Computer Science

GPA: 3.5, Cum Laude

PROJECTS

Block ARhythm

July 2019

- Designed and developed a rhythm game that can be played on PC and mobile. The player controls barriers that are used to deflect notes from hitting the center of the play area.
- Utilized RhythmTool to detect onsets from songs to generate notes that sync with the song.
- Implemented compatibility with augmented reality by using Vuforia and an image target.

Spellbreaker

May - June 2019

- Created a single player VR hack and slash game in which the player cuts through a flurry of magic projectiles aimed at them using their swords.
- Designed game mechanics and particles systems while detecting events using SteamVR.

VR Wildfire

Sept 2018

- Enhanced and debugged a VR research project that simulates the user being caught in a wildfire to see what courses of action are taken.
- Fixed errors and improved performance by analyzing and editing scripts/game objects.

VR Combination and Permutation

Feb - May 2018

- Collaborated in a team of three to develop a VR research project that tests the player's understanding of math concepts in an escape room environment.
- Utilized VRTK to implement environment interactions and player controls used to solve puzzles.

SKILLS

- **Languages:** Java (proficient), C# (proficient), HTML (proficient), CSS (proficient), Javascript (familiar), Python (familiar), C++ (familiar), SQL (familiar)

- **Tools:** Unity, SteamVR, VRTK, MRTK, Vuforia, ARCore, Visual Studio, Eclipse, NetBeans, Git